

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	570	320/101	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 10:56
S2	216	S1 and (fuel cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 12:56
S3	188	S2 and voltage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 10:56
S4	121	S3 and sens\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 16:51
S5	2	S4 and (wheatstone)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 10:57

## EAST Search History

S6	94	( "20010014415"   "20010018142"   "20020076583"   "20020094467"   "20020094468"   "20020094469"   "20030003333"   "20030022036"   "20030022037"   "20030022038"   "20030022040"   "20030022041"   "20030022042"   "20030022045"   "20030022050"   "2988656"   "3061658"   "3317348"   "3383580"   "3452347"   "3553026"   "3580741"   "3600234"   "3615842"   "3666562"   "3697325"   "3775282"   "3808534"   "3850696"   "3891465"   "3935028"   "3949545"   "3969697"   "3996579"   "4037024"   "4078893"   "4085255"   "4197675"   "4243731"   "4310606"   "4424491"   "4649537"   "4729931"   "4816768"   "4826741"   "4829290"   "5074137"   "5132663"   "5139894"   "5199396"   "5325367"   "5392873"   "5397655"   "5478662"   "5482790"   "5503944"   "5631532"   "5869952"   "5939218"   "5945229"   "6028414"   "6048473"   "6066408"   "6093500"   "6093502"   "6124054"   "6140820"   "6159626"   "6162556"   "6171718"   "6242120"   "6290594"   "6362540"   "6387556"   "6423434"   "6426158"   "6455181"   "6461751"   "6492043"   "6497971"   "6519510"   "6558826"   "6569549"   "6677066"   "8763113").PN. OR ("6979504"). URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/07 10:59
S7	2	S4 and (GMR or giant magnetoresistive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:22
S8	2	"US 20050225282"	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 17:55
S9	103	S4 and (electrical or conductive adj trace)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:15

## EAST Search History

S10	2	S9 and (GMR or giant magnetoresistive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:14
S11	5	S4 and ((electrical or conductive) adj trace)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:15
S13	2	S11 and S7	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:18
S14	2	S4 and (GMR or giant magneto\$1resistive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:23
S16	1624	324/207.21	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:53
S17	1	S16 and (fuel adj cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:54
S19	366	S16 and (GMR or giant near magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:28
S20	83	S19 and (wheatstone)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:55

## EAST Search History

S21	0	S20 and (difference adj amplifier)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:55
S22	53	S20 and (voltage with (sens\$3 or monit\$5))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:56
S23	22	S22 and (amplifier or op\$1amp)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 12:01
S24	1	S23 and (monit\$5 or sens\$3) with (battery or cell) with (voltage)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:59
S25	1	S23 and ((monit\$5 or sens\$3) with (battery or cell) with (voltage))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 11:59
S26	0	S23 and ((electrical or conductive) near trace)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 12:01
S27	2	S23 and ((electrical or conductive) with trace)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 12:01
S28	188	S1 and (fuel adj cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 12:56

## EAST Search History

S29	50	"28" and (voltage with (sens\$3 or monit\$5))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 16:40
S30	570	320/101	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 16:52
S31	216	S30 and (fuel cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 16:52
S32	188	S31 and voltage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 16:52
S33	121	S32 and sens\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 16:52
S34	76	S33 and (voltage with (sens\$3 or monit\$5))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 18:43
S35	570	320/101	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 18:43
S36	216	S35 and (fuel cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 18:43

## EAST Search History

S37	188	S36 and voltage	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 18:43
S38	121	S37 and sens\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 18:43
S39	76	S38 and (voltage with (sens\$3 or monit\$5))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/07 18:43
S40	112	S37 NOT S39	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:01
S41	2	"US 20050040787"	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/07 18:57
S42	889	320/116	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:01
S43	458	320/116\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:01
S44	299	S43 and (fuel or cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:51

## EAST Search History

S45	182	S44 and (voltage with (sens\$3 or monitor\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:51
S46	4	S44 and ((voltage with (sens\$3 or monitor\$3)) and amplifier and magnetic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:07
S48	81	S45 and (amplifier or comparator or op\$1amp)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:10
S49	0	S48 and (GMR or giant magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:10
S50	5	("4823086"   "6121751").PN. OR ("6268710").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 10:50
S51	171	320/121\$.ccls.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 10:50
S52	45	S51 and (fuel or cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:51
S53	28	S52 and (voltage with (sens\$3 or monitor\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 10:51

## EAST Search History

S54	17	(US-20030022031-\$ or US-20020037756-\$ or US-20030113599-\$ or US-20040178768-\$ or US-20030044689-\$ or US-20030062874-\$).did. or (US-6979504-\$ or US-6924164-\$ or US-7037604-\$ or US-6762588-\$ or US-6762587-\$ or US-6462510-\$ or US-6268710-\$ or US-5914606-\$ or US-6541941-\$ or US-6339313-\$ or US-6239579-\$).did.	US-PGPUB; USPAT	AND	ON	2006/06/08 11:02
S55	3	S54 and (GMR or giant magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 11:04
S56	8	S54 and (fuel adj cell)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 11:04
S57	21	("3102222"   "3930192"   "4484140"   "4616170"   "4707795"   "4709202"   "5153496"   "5498950"   "5543245"   "5557189"   "5583440"   "5644208"   "5661463"   "5703464"   "5710503"   "5811959"   "6239579"   "6339313").PN. OR ("6541941"). URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 11:17
S58	0	("6339313" "6239579").pn.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 11:18
S59	3	S54 and (wheatstone)	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 11:51
S60	0	S59 and (voltage divider)	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 11:47
S61	2	S54 and (FET or MOSFET and opto\$9 and voltage adj divider)	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 11:52
S62	1	S54 and ((FET or MOSFET) and opto\$9 and voltage adj divider)	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 11:51



## EAST Search History

S63	17	(US-20030022031-\$ or US-20020037756-\$ or US-20030113599-\$ or US-20040178768-\$ or US-20030044689-\$ or US-20030062874-\$).did. or (US-6979504-\$ or US-6924164-\$ or US-7037604-\$ or US-6762588-\$ or US-6762587-\$ or US-6462510-\$ or US-6268710-\$ or US-5914606-\$ or US-6541941-\$ or US-6339313-\$ or US-6239579-\$).did.	US-PGPUB; USPAT	AND	ON	2006/06/08 11:58
S64	1	S63 and ((FET or MOSFET) and divider and opto)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:00
S65	1	(giant adj magneto\$1resist\$3) (fuel adj cell) (amplifier or comparator) (opto\$9) (voltage adj divider) ((electrical or conductive) with trace) (FET or MOSFET) (Wheatstone)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:03
S66	1	(giant adj magneto\$1resist\$3) (fuel adj cell) (amplifier or comparator) (opto\$9) (voltage adj divider) ((electrical or conductive) with trace) (FET or MOSFET)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:03
S67	1	(giant adj magneto\$1resist\$3) (battery or cell) (amplifier or comparator) (opto\$9) (voltage adj divider) ((electrical or conductive) with trace) (FET or MOSFET)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:03
S68	14	(battery or cell) (amplifier or comparator) (opto\$9) (voltage adj divider) ((electrical or conductive) with trace) (FET or MOSFET)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:03
S69	3	("5170124"   "6140820"   "6281684").PN. OR ("6762587").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 12:27
S72	707	324/207.21\$.ccls.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 12:28

## EAST Search History

S73	171	S72 and (GMR or giant near magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:29
S74	56	S73 and (Wheatstone)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:29
S75	9	S74 and (voltage adj divider)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 15:48
S76	1	S75 and (opto\$9)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 12:29
S77	0	("6281684" "5170124").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 15:49
S78	4	("6281684" "5170124").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/06/08 15:49
S79	33489	"338"/.ccls.	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 17:56
S80	3227	S79 and (fuel adj cell or battery or cell)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 17:56
S81	614	S80 and (current with sens\$3 or monit\$5)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 17:57

## EAST Search History

S82	91	S81 and (wheatstone)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 17:57
S83	3	S82 and (GMR or giant magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:11
S84	22	S81 and (GMR or giant magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:02
S85	32	S80 and (GMR or giant magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:02
S86	10	S85 NOT S84	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:03
S87	1734	338/32R	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:03
S88	544	S87 and (GMR or giant)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:03
S89	89	S88 and (battery or cell)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:11
S90	190	S79 and (GMR or giant magneto\$1resist\$3)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:11
S91	135	S90 and ((current or voltage) with (sens\$4 or monit\$5))	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:14
S92	16	S91 and (current adj sensor)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:14
S93	7	S92 and (amplifier or comparator)	US-PGPUB; USPAT; USOCR; DERWENT	AND	ON	2006/06/08 18:15

## EAST Search History

S94	10	("3813692"   "4937521"   "4949039"   "5134533"   "5317251"   "5523687"   "5585775"   "5592082").PN. OR ("5708407").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/06/08 18:18
S95	2	"6762587".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/06/08 19:21